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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,040	01/29/2004	Cale T. Rath	ROC920030275US1	4827

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EXAMINER

PADMANABHAN, KAVITA

ART UNIT PAPER NUMBER

2161

DATE MAILED: 09/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/767,040

Applicant(s)

RATH ET AL.

Examiner

Kavita Padmanabhan

Art Unit

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/29/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Status of Claims*

1. Claims 1-20 are pending.
2. Claims 1-20 are rejected.

### *Specification*

3. The disclosure is objected to because of the following informalities:

The filing dates of the related applications have not been provided at par [0001] and par [0004], for example.

Appropriate correction is required.

### *Claim Objections*

4. **Claim 16** is objected to because of the following informalities:

The word "relation" should be changed to --relational-- at line 2 of the claim.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 101*

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. **Claims 1-20** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a test of whether the invention is categorized as a process, machine, manufacture or composition of matter and if the invention produces a useful, concrete and tangible result. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) are found to be non-statutory subject matter. For a method claim to pass muster, the recited process must produce a useful, concrete and tangible result.

In the instant case, **claims 1-9** recite methods but the methods claimed do not appear to produce a useful, concrete and tangible result.

For example, independent **claim 1** concludes with storing structured data and ordinal values in one or more tables. This does not appear to be a tangible result. **Claims 2-9** appear to be similarly nonstatutory.

**Claim 10** recites a computer-readable medium containing an executable component which, when executed performs a method that is substantially the same as the method recited in claim 1. As a result, **claims 10-14** are nonstatutory for the same reasons as explained above.

Furthermore, with respect to **claims 10-14**, the applicant's specification does not appear to explicitly define a "computer-readable medium" and based on par [0024] of applicant's specification, it appears that the computer-readable medium could comprise a signal per se, which is not statutory subject matter.

**Claim 15** recites a system for performing a method that is substantially the same as the method recited in claim 1. As a result, **claims 15-20** are nonstatutory for the same reasons as explained above.

The examiner will apply prior art to these claims as best understood, with the assumption that applicant will amend to overcome the stated 101 rejections.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. **Claims 1-5 and 7-20** are rejected under 35 U.S.C. 102(b) as being anticipated by **Chau et al.** (US 2002/0123993, hereinafter “Chau”).

In regards to **claim 1**, **Chau** teaches a method for managing structured data having one or more repeating fields, wherein at least two instances of a repeating field are contained in the structured data, comprising:

- receiving a hierarchical data structure containing the structured data (**Chau; par [0042] – XML documents are hierarchical; Fig. 11, reference character 1100**);
- parsing the structured data to identify the repeating fields (**Chau; par [0884] – parses xml document and maps to tables**);
- generating an ordinal value for each instance of the repeating fields, each ordinal value indicating an order in which a corresponding instance of a repeating field occurs in the hierarchical data structure as received (**Chau; par [0150]; par [0171]; par [0177]; par [0886], lines 17-18**); and
- storing the structured data and ordinal values in one or more relational tables (**Chau; par [0881]; par [0085]**).

In regards to **claim 2**, **Chau** teaches the method of claim 1, wherein storing the structured data and ordinal values in one or more relational tables comprises storing instance data from a repeating field in a common relational table (**Chau; par [0142]; par [0150]; par [0168]; par [0171]; par [0174]; par [0177]**).

In regards to **claim 3**, **Chau** teaches the method of claim 2, wherein the common relational table has at least a column for the instance data, a column for corresponding ordinal values, and a column for a key value to identify a data structure associated with the repeating field (**Chau; par [0142]; par [0150]; par [0168]; par [0169]; par [0171]; par [0174]; par [0177]; par [0224];** ).

**Claims 4-5** are rejected with the same rationale given for claim 1, wherein the repeating group of one or more fields consists of one field, as is required by claim 4, and the group thereby contains that one repeating field, as is required by claim 5.

In regards to **claim 7**, **Chau** teaches the method of claim 1, wherein the structured data is received as input via an interface generated based on a template structure defined by one or more fields or groups of fields (**Chau; par [0044]; par [0051] – par [0052]; par [0132]; par [0134]**).

In regards to **claim 8**, **Chau** teaches the method of claim 7, wherein:

- the structured data is annotation data related to an annotated data object (**Chau; par [0044]; par [0051] – par [0052] - XML document constitutes an annotated data object; par [0195] – furthermore, contains comments, which reinforces that XML documents constitute annotated data objects**); and
- the template structure is selected based, at least in part, on the annotated data object (**Chau; par [0044]; par [0051] – par [0052]; the interface, which must be based on an underlying template/code, is selected/used at least in part based on the input data being XML**).

In regards to **claim 9**, **Chau** teaches the method of claim 1, further comprising:

- receiving a request for the structured data (**Chau; par [0051] – par [0052]; par [0702]; par [0939]**);
- retrieving the structured data and ordinal values from the one or more relational tables (**Chau; par [0884]; par [0939]**);
- assembling the structured data in a hierarchical data structure based on the hierarchical data structure in which it was received, with a position of instance values of repeated fields within the hierarchical data structure determined by corresponding ordinal values (**Chau; par [0150]; par [0171]; par [0177]; par [0886], lines 17-18; par [0939]**); and
- returning the assembled hierarchical data structure (**Chau; par [0051] – par [0052]; par [0702]; par [0939]**).

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**Claims 10, 11, 12, 13, and 14** are rejected with the same rationale given for claims 1, 2, 3, 4, and 9, respectively.

**Claims 15, 16, 17, 18, 19, and 20** are rejected with the same rationale given for claims 7, 2, 3, 4, 9, and 8, respectively.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. **Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Chau in view of Mihai et al.** (US 2005/0065817, hereinafter "Mihai").

In regards to **claim 6**, **Chau** teaches the method of claim 1.

Chau does not expressly teach receiving the structured data in a hierarchical format as a Simple Object Access Protocol (SOAP) message.

**Mihai** teaches SOAP as a messaging protocol for encoding XML to be sent or received over a network or communication path (**Mihai; par [0118] – par [0119]**).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement the method of Chau using the SOAP messaging protocol to send XML data so that the data can be received by a web services type of software interface (**Mihai; par [0118] – par [0119]**).

### ***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kavita Padmanabhan** whose telephone number is **571-272-8352**. The examiner can normally be reached on Monday-Friday, 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kavita Padmanabhan  
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September 16, 2006

*Kl.*  
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**UYEN LE**  
**PRIMARY EXAMINER**